DOCUMENT RESUME

ED 074 345 AC 014 288

AUTHOR	Long, Huey B.
TITLE	The Education of the Mentally Retarded Adult: A Selective Review of Recent Literature.
INSTITUTION	Adult Education Association of U.S.A., Washington, D.C.; Syracuse Univ., N.Y. ERIC Clearinghouse on Adult Education.
SPONS AGENCY	National Inst. of Education (DHEW), Washington, D.C.
PUB DATE	1 Apr 73
NOTE	58p.
EDRS PRICE	MF-$0.65 HC-$3.29
DESCRIPTORS	*Adult Education; Annotated Bibliographies; Day Care Services; *Literature Reviews; *Mental Retardation; Motor Development; Reference Materials; Rehabilitation Programs; Sheltered Workshops; Special Education; Task Analysis; Teaching Techniques; *Vocational Rehabilitation

ABSTRACT

There is an increasing body of literature on the education of retarded adults; yet it appears to lack visibility because of recent origin, limitation mostly to journals and specialized publications, and general content with sparse references to adults. Three broad interest areas appear in the literature -- the raticnale for such education, teaching techniques and teachers, and program and curricula. Vocational rehabilitation, the major area where retarded adults have found backing, supports the thinking that retardees have the potential to live in the community at a fair level of independence. Teaching techniques for them differ slightly in an emphasis on more motor skills, on task analysis with rewards at each step, and on clinical teaching, with more detailed records and observation. Literature on teachers is almost non-existent. Trends seem to be developing toward day care centers, sheltered workshops, and activity centers. Curricula reflect the missions of the centers, heavily weighted toward vocational rehabilitation. Most references are annotated. (Author)

FILMED FROM BEST AVAILABLE COPY

U.S. DEPARTMENT OF HEALTH
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

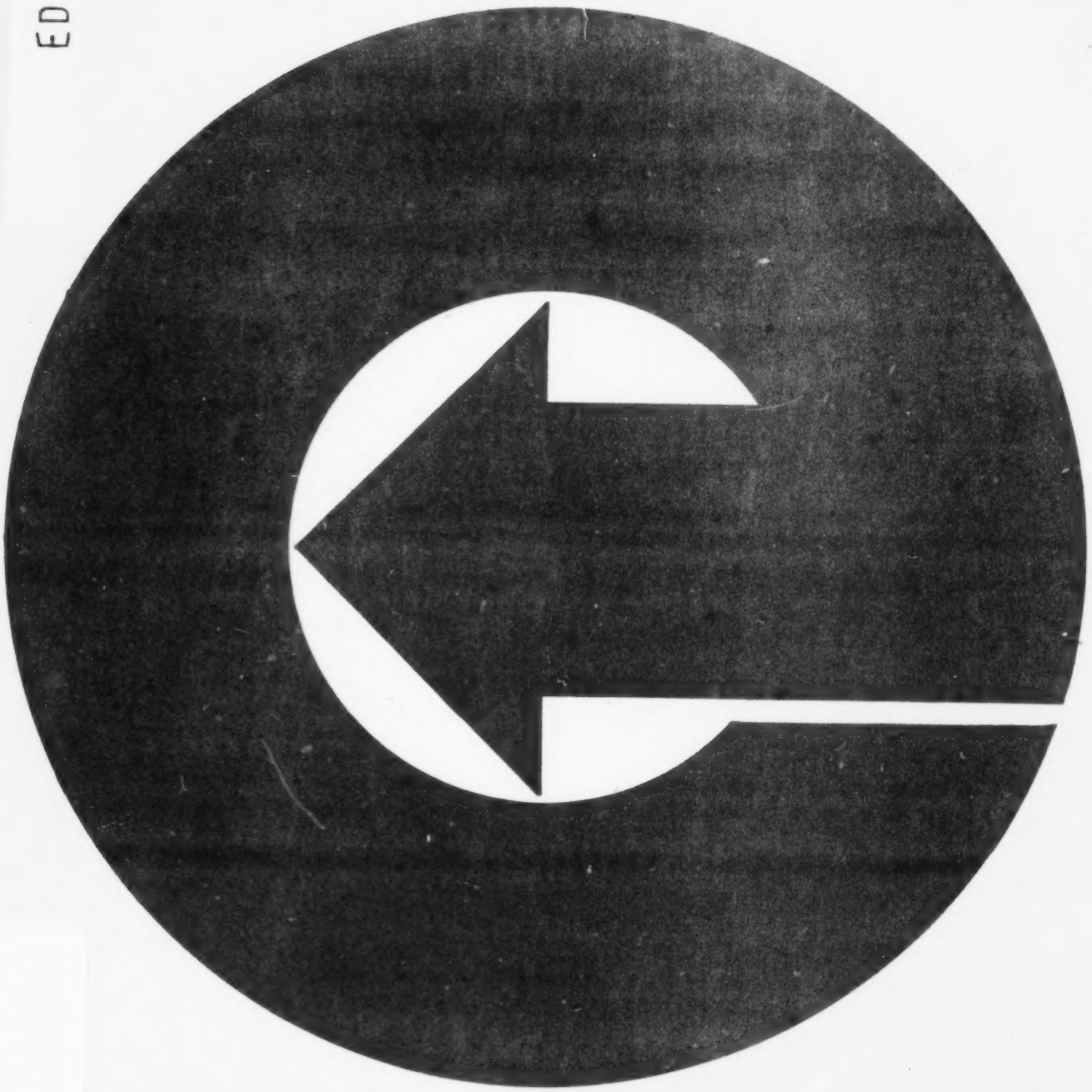
The Education of The Mentally Retarded Adult:

A Selective Review of Recent Literature

By Huey B. Long

ERIC Clearinghouse on Adult Education
Adult Education Association of the U.S.A.

ED 074345



HE 004 285

THE ADULT EDUCATION ASSOCIATION OF THE USA

A national organization for individuals as well as institutions dedicated to the development of unity of purpose in the adult educational movement; the production of available knowledge about adult education for the membership; the continuous effort to alert the nation's key leaders and the general public to the need for continuing education; the establishment of a home base for those who make adult education their chosen life's work.

PUBLICATIONS

Adult Leadership is a national magazine published monthly, except July and August, specifically for all adult educators, and for persons interested in adult education. It provides a reservoir of ideas and techniques in continuing education through articles, specail sections and regular features.

Adult Education is a national magazine published quarterly and designed for the interests of the professional worker in adult education. It deals primarily with research and theory in adult education. Summer issues list pertinent surveys and research in progress in adult education.

Other Publications - AEA/USA publishes may timely books, pamphlets, newsletters and bulletins throughout the year in specialized areas of adult education. All publications are sold to members at reduced prices; two examples of AEA/USA publications currently available are the new HANDBOOK OF ADULT EDUCATION and the 1971 REGISTER OF RESEARCH. Also available are reprints of articles and special sections of the national publications, Adult Leadership and Adult Education.

For special Publications Brochure, write to:

Adult Education Association of the USA
810 18th St. N.W.
Washington, D.C. 20006

THE EDUCATION OF THE MENTALLY RETARDED ADULT:

A SELECTIVE REVIEW OF RECENT LITERATURE

Huey B. Long
UNIVERSITY OF GEORGIA

ERIC Clearinghouse on Adult Education
and
Adult Education Association of the USA

ABSTRACT

There is an increasing body of literature on the education of retarded adults; yet it appears to lack visibility because of recent origin, limitation mostly to journals and specialized publications, and general content with sparse references to adults. Three broad interest areas appear in the literature -- the rationale for such education, teaching techniques and teachers, and program and curricula. Vocational rehabilitation, the major area where retarded adults have found backing, supports the thinking that retardees have the potential to live in the community at a fair level of independence. Teaching techniques for them differ slightly in an emphasis on more motor skills, on task analysis with rewards at each step, and on clinical teaching, with more detailed records and observation. Literature on teachers is almost non-existent. Trends seem to be developing toward day care centers, sheltered workshops, and activity centers; curricula reflect the missions of the centers, heavily weighted toward vocational rehabilitation.

This document was prepared pursuant to a contract with the Office of Education, U.S. Department of Health, Education and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their judgment in professional and technical matters. Points of view or opinions do not, therefore, necessarily represent official Office of Education position or policy.

TABLE OF CONTENTS

FOREWORD..... iv

PREFACE..... v

Chapter

I. INTRODUCTION..... 1

II. RATIONALE AND PHILOSOPHIES..... 9

III. INSTRUCTIONAL TECHNIQUES AND TEACHERS..... 16

IV. PROGRAMS AND CURRICULA..... 23

V. CONCLUSIONS..... 30

REFERENCES..... 32

ORDERING INSTRUCTIONS..... 50

FOREWORD

For a long time special education has received much attention in the elementary and secondary schools, and this is reflected in the relatively large amount of literature in this area. However, education of the mentally retarded adult is only now beginning to receive consideration and some visibility in the literature.

The need to pull together what we already know from the existing literature on this subject is a real one, although not recognized as such by enough people responsible for the education of our citizens.

The ERIC Clearinghouse on Adult Education took the initiative to ask Huey B. Long to prepare a selective review of recent literature dealing with the education of the mentally retarded adult in response to an increasing number of queries received on this subject.

Dr. Long has brought all of his scholarship to this project, and produced a document which will be a starting point for many other colleagues who will fill in the large gaps evident in the literature dealing with the education of the mentally retarded adult.

The profession is indebted to Huey Long for his review, and indirectly all the mentally retarded adults who will have been helped from its use by those responsible for their education and training.

Thanks are also due to the Adult Education Association of the U.S.A. for making this publication available more widely.

April 1, 1973

Stanley M. Grabowski
Director
ERIC Clearinghouse on Adult Education

PREFACE

This writer became interested in the educational concerns of personnel engaged in teaching mentally retarded adults when he was called on to work with teachers at a state mental institution. A cursory examination of the literature suggested the desirability of, and need for, a more intensive review. Such a review was made possible by the assistance of the ERIC Clearinghouse on Adult Education.

The timeliness of the review is reflected by several recent developments. In November the writer received an inquiry concerning in-service educational programs for teachers of mentally retarded adults from a Canadian professor. And two recent issues of Adult Leadership have contained an article and a news-note on programs for the mentally retarded adult. The writer sincerely hopes that this review will stimulate additional concern for educational opportunity for the mentally retarded adult.

The writer is indebted to numerous individuals for assistance with the project. Special thanks are expressed to Dr. Buford Kesler and Dr. Charlotte Williams of the University of Georgia who read a draft of the manuscript and made many helpful suggestions. Weaknesses in the manuscript were certainly reduced by their help and those that remain are the sole responsibility of the writer. Accolades are also due to Mrs. Diane Shipp, typist and secretary extraordinaire. Her contributions to the project were outstanding.

Huey B. Long

CHAPTER I

INTRODUCTION

The dynamics of society are such that change in one social area is soon followed by a related change in another area. Verner and others (94, p. 1) stated the idea as follows:

> The evolution of a society is marked by the occurrence of specific needs that must be satisfied if a society is to survive and grow. These needs and their satisfaction create special tasks that must be performed by some members of the society. At first, the required work is done by volunteers but as the need persists, those who do the necessary work become specialists and this in turn leads to the training of new members to perform the tasks.

The above statement also appears to project a model that reflects the developmental status of education for the mentally retarded adult. Historically, education for mentally retarded persons in the United States has focused on the non-adult, and like adult education in general the idea of providing educational opportunities for the mentally retarded adult has been limited in its development. However, there seems to be an increasing visibility of the idea in the literature and in the field of practice. For example, a recent survey by this writer revealed that most states, according to responses, now provide some kind of educational program for mentally retarded adults.

Even though the number of mentally retarded adults currently being provided educational opportunities is relatively small, there are indications that such programs will increase in numbers during the next decade. Such an increase in activity and enrollment contains important implications for the adult educator. For example, most adult educators are aware of the problems experienced when elementary and secondary school teachers were recruited to teach adult basic education with little understanding of adult--non-adult

differences. A similar possibility resides in the area of education for mentally retarded adults.

Meyen (56, p. 353) observed the problems when he noted,

> Coupled with the rapid growth of special classes for the mentally retarded is a growing concern for the quality of instruction being provided through these classes. A number of factors have contributed to this situation: the lack of well-defined instructional objectives; failure on the part of school districts to implement sequential programs instead of individual classes; and the frequent omission of effective inservice training of teachers for the mentally retarded.

The emerging nature of the field thus appears to emphasize the timeliness and importance of this review.

Definitions

For the purpose of this review the term "mentally retarded adult" is used to include all persons 18 years of age or older who are intellectually handicapped. The literature reviewed generally deals with the mentally retarded, persons described as being limited in their ability to learn. In more scientific terms mental retardation refers to sub-average intellectual functioning which originates during the developmental period and is associated with impairment in adaptive behavior. (87)

The terms "retarded" and "mentally retarded" are used interchangeably.

Some minor problems are related to the age criterion since some states provide continuous assistance to the retarded person, beyond age 18, similar to assistance provided during earlier years and as such may, or may not, be viewed as service to an "adult." (87, p. 1)

Population

The number of mentally retarded persons in the United States is generally estimated at about 3 percent of the population, currently about six million persons. As will be noted in more detail later, there are differences among the retarded just as there are among the rest of the population. (87)

Generally, individuals with an I.Q. of above 50 are capable of being educated for a relatively independent life. The retarded whose I.Q. score falls below 50 range from those with a potential for satisfactory work under sheltered conditions to those who are completely helpless.

Table 1 provides an estimation of the distribution of retarded persons in the United States by age and degree of retardation.

TABLE 1
ESTIMATED DISTRIBUTION OF RETARDATES IN THE UNITED STATES BY AGE AND DEGREE OF RETARDATION[1]

Degree of Retardation	All Ages		Age by Years	
	Number	Percent	Under 20	20 and Over
TOTAL	6,000,000	100.0	2,454,000	3,546,000
Mild (I.Q. 52-67)	5,340,000	89.0	2,136,000	3,204,000
Moderate (I.Q. 36-51)	360,000	6.0	154,000	206,000
Severe (I.Q. 20-35)	210,000	3.5	105,000	105,000
Profound (I.Q. 20-0)	90,000	1.5	52,900	37,100

[1]From The Problem of Mental Retardation, p.2 (87).

Procedures

The literature reviewed in this publication was identified in the following manner:

1. Key words such as adult, adult learning, brain damage, curriculum, educable mentally handicapped, learning disabilities, mental retardation, mentally ill, sheltered workshops, special education, trainable mentally handicapped, and vocational rehabilitation were selected.

2. These key words were then checked with the ERIC Thesaurus and an index to the sociological and psychological abstracts at the University of Georgia Computer Center.
3. A computerized search of the literature was then initiated.
4. Printouts provided appropriate titles for review.
5. Journal articles, ERIC microfiche, and other publications were then examined for appropriateness.
6. Appropriate publications were then reviewed and catalogued for reference.

The above procedure was supplemented by contacting the following organizations:

1. Association for Children with Retarded Mental Development, Inc.
2. Bureau of Education for the Handicapped, U. S. Department of Health, Education and Welfare.
3. Council for Exceptional Children.
4. National Association for Retarded Children.

A parallel search was also conducted by the writer by checking references provided in previously identified publications.

Limitations

The procedures employed to identify the appropriate literature contained built-in limitations. For example, since much of the literature was identified by a computerized search of selected indexes and abstracts of contemporary origin, the literature identified and reviewed is of rather recent origin. Most of the publications reviewed were printed after 1960.

The apparent "emerging" or developing interest in education for the mentally retarded adult also appears to be of recent origin. Such a development within itself almost automatically insures that such a review would be primarily based on recent publications.

Finally, the literature reviewed was generally concerned with specifically identified topics. For example, if the literature specifically concerned education of retarded individuals who were not adults, it was not reviewed. Conversely, if the literature provided a general treatment of the mentally retarded person with no specific restrictions according to age, it was reviewed if it applied to the broad topical areas described in the Table of Contents. For example, an article devoted to a discussion of medical problems of mentally retarded adults would have been reviewed only if the problems were related to educational concerns. Likewise, curriculum materials designed for non-adults were not reviewed. Since most of the literature identified in the area of curriculum materials deals with the curriculum for non-adults, the literature reviewed in this topical area is rather limited.

The Literature

There is an increasing body of literature on the education of the retarded adult. However, the literature appears to lack visibility because of certain characteristics. The literature may be characterized as (1) of recent origin, (2) generally limited to journals and specialized publications in the area of mental retardation, and (3) general in content with sparse references specifically to the adult. While the bulk of the literature on the education of retarded persons is focused on children and is encouraged by organizations and agencies concerned with children, these same organizations and agencies have contributed to the emerging literature on retarded adults. The Vocational Rehabilitation Administration appears to be the dominant governmental agency in the field; subsequently, much of the literature reflects a vocational rehabilitation thrust.

While much of the literature reviewed has appeared in professional and/or specialized publications, the experimental research dimension is extremely limited. The bulk of the literature may be described as being philosophical and descriptive. Smith (77) observes that comment on the retarded adult is an especially formidable task because of the lack of research and study reported on these individuals. Furthermore, he notes this condition is in stark contrast to the relatively higher quantity and quality of the professional literature on the mentally retarded at other age levels. The possible reasons for this discrepancy, according to Smith, include (1) the difficulties scientists have in locating retarded adults after they have been discharged from a vocational rehabilitation program or have left school after a work-study experience; (2) the great disparity among retarded adults which suggests that there is no single population of these individuals; and (3) the general feeling among scientists that longitudinal and follow-up studies are too hard to control, take too long, and lack the same magnitude of potential professional pay-off as do cross-sectional studies. Thus, the visibility and importance of the literature may be further hampered. For example, while there are numerous complete books on a variety of educational topics concerned with exceptional children, the reviewer was able to identify only one such good book on adults, The Retarded Adult in the Community, by Elias Katz. (45)

The Retarded Adult in the Community may be compared, in importance, with E. L. Thorndikes' Adult Learning. Every adult educator interested in the mentally retarded adult should be familiar with the Katz book.

A second, more general book of readings of lesser value to the adult educator since the bulk of the material deals with non-adults is Planning Community Services For The Mentally Retarded, edited by Edward L. Meyen. (55)

A third book that is recommended for the adult educator with limited understanding of the retarded person is An Introduction to Mental Retardation

by Robert M. Smith. (77) Of six chapters, one is specifically devoted to the retarded adult.

One of the better introductory books dealing with teaching techniques is Methods for Learning Disorders by Meyers and Hammill. (60) However, the reader is forewarned that the book is an introduction and application will be possible only after additional study of other sources.

All of the above books were published in 1967 or later.

The problems and challenges in providing a useful and reliable review of literature appear to be often overlooked by many readers. Thus, it is appropriate to refer to Smith's (77, p. 129) discussion of the "weakness of the literature." He observes,

> Finally, a word of explanation about the enormous body of research literature which has focused on specifying characteristics of mentally retarded children and adults from every conceivable perspective and on innumerable dimensions. The behavioral literature is filled with studies of various degrees of sophistication in which attempts have been made to typify the retarded in terms of variables involving speech and language, hearing, visual performance, concept formation, reading competencies, perceptual motor development, attention, reinforcement preferences, and on an infinite array of additional factors. Attempts have been made to summarize this literature and point out the principle common thread (Stevens and Heber, 1964; Clarke and Clarke, 1965; Ellis, 1963). These efforts have been helpful to scholars and students who have an interest in quickly becoming familiar with the status of knowledge on a particular topic.
>
> If one digs deeply into this body of literature, however, it soon becomes apparent that mammoth discrepancies exist among the reports which have focused on similar topics. Indeed, in many instances, contradictory findings will be reported. A closer inspection of the research reports may reveal that subjects are selected from different populations of retardates, that the same instruments are not used to measure the factor on which the research focuses attention, or that the data from the various studies are analyzed using different approaches. In short, although the scientists are studying similar variables, their studies are not comparable because of internal differences which are peculiar to each investigation.

With Smith's warning in mind and also considering the characteristics of the literature on the education of retarded adults referred to earlier, this review is concerned more with the "application" and interpretative literature.

The result is that the possibility of error, inadequate reporting, and bias on the status of the retarded on one or more variables is assured in those instances where an author (1) summarizes the research in a specific area but fails to obtain an adequate sample of the complete reports which represent the most current, methodologically sound studies on the subject; (2) fails to conduct an in-depth evaluation of the available studies to determine the areas in which possible sources of error and bias may be present; (3) has a point of view which he wishes to support with research and fails to consider data which support alternative positions; or (4) is unskilled in conducting an evaluative analysis of empirical research and/or is unable to identify the common threads which intermix throughout the group of studies. The purpose of this discussion is to highlight the fact that the literature on the characteristics of mentally retarded children and adults is in disagreement.

Three broad interest areas appear to be identifiable in the literature. These three areas include:

1. The rationale for education for the mentally retarded adult.
2. Instructional techniques and teachers of mentally retarded adults.
3. Program and curricula.

CHAPTER II

RATIONALE AND PHILOSOPHIES

President Kennedy's special interest in the plight of the mentally retarded person appears to have stimulated an increasing sensitivity for the retarded adult during the 1960 decade. However, the awareness of the retarded adult has not created a deluge of educational opportunity. Certain controversial areas remain to be resolved before education for the mentally retarded adult is accorded importance similar to education for the retarded child.

The child appears to generate greater sympathy and has greater emotional appeal to citizens, legislators, and educators. Furthermore, the concept of education for the retarded child is often based on the idea of "preparing the child for the future." Whereas, traditional concepts of education in the United States suggest that after an individual reaches adulthood it is too late for education. These ideas are even pushed farther into the area of net social and economic worth. And thus far it has been easier to justify the expenses for education for the mentally retarded child than for the retarded adult.

Kidd (46, p. 54) explains the problem as follows; there is an unwarranted assumption that:

> There is a terminal plateau of learning at about age 16 for retardates. As far as there is tangible evidence, "there ain't no such thing!" It seems that the idea is an artifact of the original standardization of the Binet-Simon Test in the early 1900's. Since they terminated planned differentiation among abilities of learners after about age 15 many people seem to have found solace in the thought that mental retardates cannot learn anything after about that age. As a matter of fact mental retardates can learn at least to senility. This assumption coupled with the Vocational Rehabilitation eligibility age of 16, and contaminated by the fact that most of the states terminate compulsory schooling at 16, has provided a rationale for failure entirely too common in our work.

Smith (76) has observed that concern for adults may be limited because of the feeling among certain retardation specialists, and to a much greater extent among the general population, that most retardates can never really be viewed as adults because their characteristics are more "childlike" than "adultlike."

The Board of Directors of the National Association for Retarded Children made a similar observation in policy statements issued in 1971.(61, p. 8) They observed,

> Although the validity of continuing education for normal adults seems now generally accepted, the relative lack of such programs for retarded persons suggests a widespread belief that persons with below average intelligence somehow cease to learn beyond the age of approximately 20 years.

As a result of the problems as identified above, the NARC adopted the following policy: (61, p. 8)

> Education is a life-long experience. NARC believes that young retarded persons should have the opportunity to develop further during adulthood by means of programs of continuing education. The rapidly changing environment in which most retarded adults live necessitates continuing education to insure competence in handling problems of daily living.

Reporting trends and issues in the education of mentally retarded persons, Phillip Roos (71, p. 51) noted:

> Expansion of education programs for retarded adults has probably lagged even behind the preschool programs. . . .
>
> In general, retarded adults have been assigned to vocational training programs aimed at developing specific work skills or to "activity centers" designed primarily for those considered too handicapped for sheltered workshop placement. . . . Most activity centers are operated by local associations for retarded children, and many furnish only limited services. . . .
>
> Just as educational programs are gradually expanding to serve a wider age range, they are also expanding to include the more seriously retarded.

Katz (45) cites two reasons for concern about the retarded adult in the community. The reasons are: (1) the large number of persons involved, and (2) the high cost of such individuals to society.

Furthermore, according to Katz, the mentally retarded adult has needs similar to all human beings. He suggests these needs may be classified as physiological and psychosocial. He elaborates (45, p. 75):

> The mentally retarded adult's physiological needs to survive are the same as those of any other person. The retarded individual, however, being less mentally competent and often less physically able than his normal counterpart, has a greater struggle to fulfill his survival needs. . . .
>
> Psychosocial needs arise in the process of social living. They may be broadly grouped as needs for security and needs for adequacy. . . .
>
> Retarded adults are often unable to satisfy their needs to achieve security, adequacy, and self-esteem; to gratify their curiosity and to test reality. Some develop heightened needs for affection and social approval. Others may withdraw excessively or may react to their frustration by hostility and aggressive behavior.

The literature on the retarded adult, popular conceptions notwithstanding, presents a strong argument for the positive achievement of retarded persons properly provided for. Peck (65, p. 73) says,

> The handicaps inherent in brain damage and in severe environmental deprivation during childhood will always create a group of adults who are largely ineffectual in the community. But this does not justify a position that the retarded cannot be helped to more effective membership in society, including educables and to some extent trainables. The significant evidence is that the proportion who do respond positively to the new program (work-study) exceeds the proportion who do not.

The apparent ability of many exceptional adults to become absorbed into society appears to provide good evidence of the coping behavior of such persons. Katz (45, p. 28) illustrates the phenomenon.

> Although the precise number of mentally retarded adults is not known, the best estimate would indicate that they comprise no less than one to two percent of the total population of the United States. The total number of mentally retarded adults thus would be in excess of 2,000,000 persons.
>
> . . .Where are all the mentally retarded adults? They must be in the community because there were fewer than 100,000 adults in state institutions for the retarded in 1965. All surveys of the mentally retarded in the community have located only a very small percentage of the adult retarded, far fewer than anticipated.
>
> In seeking an answer. . .it should be pointed out that some 85 percent of the mentally retarded are in the mildly and borderline retarded intelligence ranges, while 15 percent of the retarded (less than one quarter million retarded adults) are in the moderately, severely, and profoundly retarded levels.

Krim (48, p. 3) cites similar data and makes similar observations.

> . . . the 75 to 80 percent who are mildly retarded and usually have only minor physical handicaps or none . . . are usually recognized as deficient during their school years. They are to a large extent capable of being absorbed into society during adulthood. Many, however, are relegated to a marginal existence of unemployment, poverty, and not infrequently, brushes with the law.

One of the most positive positions in the literature is reflected by Katz (45, pp. 12, 17, 21).

> Most mentally retarded persons have untapped potentials for achieving higher levels of personal, social and vocational functioning than they are presently achieving. The whole system of special education of mentally retarded children in the public schools is based on public understanding of, and support for, the idea that most retarded children have the potentials of becoming independent citizens and can be helped to accomplish these goals through specialized training. There does not appear to be the same widespread understanding of, and support for, the idea that most retarded adults also have the potentials for becoming good citizens if provided with needed services.
>
> While the mentally retarded adolescent is still in school his major needs are met. He is supervised, receives training and counseling, and his day is filled with activities. After he is "graduated," the picture changes completely. The school is no longer there to meet his needs, and he is on his own. He must find gainful employment, recreation and social activities without help.
>
> When they leave the public school program . . . the mentally retarded may not have achieved the social maturity nor have attained the training necessary to cope with the social and vocational demands made on adults. A . . . delay in maturation is noted in many retarded adults.
>
> If . . . funds were used to develop adequate facilities, programs and services in the community to meet the needs of retarded children and adults, there would be no reason to place the retarded in even the most advanced state institutions.

Since vocational rehabilitation has been one of the major activity areas wherein retarded adults have found financial and educational support, it is to be expected that that area should provide evidence to support or refute the previous positions. In the form of a question, has the potential alluded to earlier been verified by vocational success?

The literature on vocational placement of retarded adults does indeed appear to support the assertion that the mentally retarded adult possesses the potential to live in the community at a fair level of independence. The findings

of research in the area of the vocational success of retarded adults are reported below.

Tobias' (84) 1966-67 study on a random sample of mentally retarded adults in New York City revealed that 59 percent of the males and 29 percent of the females interviewed were engaged in competitive employment. Twenty-nine percent of the total sample reported they had previously been employed but were currently out of work and slightly over 20 percent of the entire sample reported they had never been employed, with females constituting the bulk of this group.

The President's Committee on Mental Retardation has reported:

> The vocational success of the mentally retarded is better than is generally believed. An estimated 87 percent of mildly retarded adult males (I.Q. 50-69) are employed, a rate that is only 4 percentage points below that of males in the general population. Among mildly retarded women, the comparable rate was 33 percent. Although their rate is 12 percentage points below that of women in the general population, much of the difference is explainable by the greater tendency of mildly retarded females to be full-time homemakers.
>
> In both cases earnings were slightly over 85 percent of average wages in the population. . . .

According to the report of the President's Committee (66), mental retardation, in most cases, is not a barrier to work since the mildly retarded constitutes the largest group in the retarded population. However, even among persons with I.Q.'s between 40-50 it is estimated that 45 percent of the males and 12 percent of the females are employed at wages that are 19 percent of the average in the population. The President's Committee further indicated that the retarded adults who do not work are usually persons with I.Q.'s below 50 and those who have multiple disabilities.

Further support for the suggestion that retarded adults can be trained and successfully placed is provided by Strickland and Arrell (82) and by Albiz u-Miranda and others (3).

Strickland and Arrell made a study of records in the state office of the Texas State Division of Vocational Rehabilitation to determine the extent

to which educable retarded youth found employment on jobs for which they were trained. Records for a 26-month period provided the data which revealed that 80.2 percent of 1,405 clients secured employment on a job for which they were trained.

The Albizu-Miranda study was designed to discover the proportional distribution of successful retardates (among other things) in Puerto Rico. Accordingly, it was concluded that the proportion of successful retardates was dependent on the complexity of the community; in peasant communities 78 percent of the retardates were considered successful while in urban non-slums the percent of successful retardates dropped to 60 percent.

Goldstein (29) has summarized research on social and occupational adjustment of the mentally retarded. His findings are in agreement with work cited earlier. His appraisal of previous research suggests that not only is more research essential in social and vocational adjustment, but also that much of what is already known is not put to use in the field.

If the preceding accurately reflects reality, i.e., if most retarded adults possess the potential for successfully coping with community living requirements, with appropriate education, why are so few programs designed and provided for retarded adults?

Katz (45, p. 105) appears to have identified one of the major reasons--money! He notes:

> While adult education could have a significant and widespread role in training mentally retarded adults, there are problems which must be worked through before this can be accomplished. First, unless there is universal acceptance that smaller classes are needed for retarded adults and that necessary funds must be made available for this purpose, there will be only a few school districts willing to use tax-supported funds to meet the deficits created by such classes. . . .

Other problems cited by Katz include lack of adequately prepared teachers and problems of reconciling roles of adult education and vocational rehabilita-

tion. Concerning the latter problem he notes " . . . adult education with its interest in educating the whole person, and vocational rehabilitation, with its interest in vocational aspects, must be reconciled so that there is a mutual working together" (45, p. 105).

CHAPTER III

INSTRUCTIONAL TECHNIQUES AND TEACHERS

Perhaps one of the least appreciated facts about retarded adults is the fact of heterogenity. Mentally retarded adults are not a homogenous group but are individuals who differ widely. Even with the same I.Q. level there is wide variation in their physical capacities, interests and abilities (45, p. 9). But perhaps of greater importance is the wide variation of abilities within each individual.

Such diversity among and within retarded adults creates serious problems when writers, researchers, and teachers attempt to generalize to the larger population (97). The problem perhaps even becomes more serious in an effort to review and summarize the literature as it relates to learning problems and processes of retarded adults.

The problem of review and summation is even more acute when there is such limited research available on the selected topics. The President's Committee on Mental Retardation in 1968 was sufficiently cognizant of the severity of the problem to place research in the causes of mental retardation and in methods of care, rehabilitation and learning at the top of its list of recommendations. (45)

The tendency of education research for adults to be a poor second to research concerning non-adults applies in the area of mental retardation as well as most areas. The President's Committee on Mental Retardation noted that while a program of educational research has yielded significant findings that

will improve the education of mentally retarded children of school age, about half of the mentally retarded are in the post-school adult group where small allocations are made for research. Furthermore, the limited research on this group is usually on vocational rehabilitative aspects. (45)

Following up on Goldstein's (29) comments cited in chapter 2 concerning the need for application of existing knowledge of the mentally retarded person, Katz (45) suggests that existing approaches, methods and facilities must be strengthened and new ideas need to be developed.

Instructional Techniques

General instructional techniques used in the teaching of retarded persons appear to be similar to techniques used in regular learning situations. Bensberg provides the rationale for such commonality in suggesting that a retarded child learns in the same way as a normal child and the methods of stimulating and teaching are the same. However, there is some disagreement with such a view. (42, 43, 44, 50, 51, 56, 58, 85) Egg (23, p. 84) suggests, "As far as humanly possible, treat the retarded child like a normal child, but do not expect him to react like one." While not all the previously noted sources are directly concerned with instructional techniques, authors' comments suggest dissatisfaction with techniques, among other things. (42, 43, 44, 50) Roos (71, p. 55) specifically states his dissatisfaction in noting " . . . a lack of success with current teaching strategies is a serious basis for concern. Little innovation has been noted in curriculum or teaching methodology."

Whereas, Smith (77) observed that there is a great disparity among retarded adults that suggests there is no single population of these individuals and Whitman and Sprague (97) appear to agree, he suggests there are general behavioral characteristics that typify many (but not all) of the retarded.

Such a distinction further suggests the possibility of instructional techniques especially suitable for the retarded.

Smith (77, p. 23) cites the following as behavioral characteristics that may be observed among retarded individuals. The mentally retarded seem to:

1. Have difficulty focusing their attention on a task or a predominant stimulus;
2. Frequently be bothered by the presence of peripheral stimuli which are either irrelevant or of secondary importance at the particular moment;
3. Either overrespond or underrespond in intensity or frequency to a stimulus condition;
4. Have difficulty matching a response, which would generally be considered appropriate, with a problem or situation for which some reaction is necessary;
5. Have a lower tolerance for frustration and be more hesitant to participate in an unfamiliar activity because of having experienced previous failures;
6. Have some difficulty in communicating their thoughts and ideas to others.

The instructional techniques for retarded persons are discussed in the literature in terms not vastly different from the terms used in the literature on instructional techniques for others. For example, there is a concern for motivation, (5) self-concept, (49) and reinforcement. (76)

Some instructional principles in the literature (77) include readiness, immediate reinforcement, active participation, an emphasis on over-learning, and sound sequencing.

While the need for clarity of objectives and procedures is great for average learners, it appears to be extremely important for retarded learners.

The major areas of difference i the literature of instructional techniques for retarded adults include behavioral modification, task analysis and clinical teaching. Behavioral modification ultimately appears to be reflected more in terms of degrees or emphasis since behavioral modification is also used in classrooms for regular students. Yet the emphasis on motor skill activity in certain instructional areas appears to be closely allied with behavioral modification techniques.

Another way in which instruction for the retarded person varies, in terms of emphasis, from traditional classroom teaching is the emphasis on task analysis. Each learning task is thoroughly analyzed with each learning sequence defined. Then instruction and guidance is provided for each sequence with appropriate rewards for success, until the complete task is learned. (77)

Clinical teaching (77) perhaps provides the greatest distinction between techniques employed with retarded persons and average persons. Clinical teaching is based on more detailed records and observations concerning the abilities and interests of the learner. To aid in the collection of this kind of information and to systemize the process to some extent, diagnostic specialists use various types of measuring devices, such as rating scales, check sheets, tests, questionnaires, and surveys to obtain answers to specific questions.

The use of clinical teaching techniques requires close cooperation between the diagnostician and teacher. The prescriptive nature of the technique also appears to suggest the need for a low pupil-teacher ratio. One of the best publications in the area is Methods For Learning Disorders by Myers and Hammill. (60) The book is best perceived as an overview that provides the reader with sufficient information to appreciate differences among a variety of clinical teaching models, but does not provide sufficient information for

the novice to adopt and to use one of the approaches. Additional study will be required before the novice can use the techniques.

One of the more important developments in recent years that has direct implications for the instruction of retarded adults is the increasing acceptance of a developmental model by professionals working with retarded persons. Roos (71) has described four models that have influenced the relationships between professionals and retarded persons.

According to the developmental model, the retarded person is perceived as a human being with development potential. This model supports the establishment of training and educational services in contrast to the other models that focus on medical treatment, captivity, or management. The developmental model encourages the recognition of the human qualities and needs of the retarded person and thereby should influence the selection and use of educational techniques.

Before leaving the literature of instruction, it should be noted that while the literature dealing with instructional techniques for mentally retarded adults is extremely limited, the opposite is true for the literature on techniques for retarded children. Of particular interest is the amount of literature available on programmed instruction. A similar body of literature is available in the area of curriculum guides. While there is some danger involved, the teacher of exceptional adults <u>can</u> turn to the children's literature for ideas.

As a reflection of the search for better teaching techniques it is noted (71) that approaches used decades ago (many before 1940) have been regaining popularity. Roos cites a revival of interest in the Montessori approach. Doll (20) also suggests a revival of interest in the developmental approach, sensory-motor stimulation, concrete and practical instruction, and social and vocational training.

Other voices (79) have suggested an application of Piaget's approach to cognitive development.

Teachers of Retarded Adults

The literature on teachers of retarded adults, certification requirements, and professional educational requirements is almost non-existent. The limited literature could be characterized as being generally negative concerning teachers of retarded persons.

Lavely and Lema (51, p. 117) point out:

> Despite the fact that there has been remarkable and consistent growth of community classes for trainables in the past 20 years, there is relatively little attention given by professionals to the preparation of teachers.

Furthermore, according to Lavely and Lema a variety of studies indicate negative results when trainable mentally retarded persons are placed in special classes. These results have been interpreted to suggest that major causes are an inappropriate curriculum and inadequate instruction. The literature (51) fails to provide meaningful criteria for determining or judging (1) the specific knowledge and understanding required of teachers of exceptional persons, (2) at what academic level preparation should be offered, (3) the length and scope of training necessary, and (4) the level of maturity and sophistication essential for persons to most effectively obtain the competencies essential to perform the required services needed by the retarded student.

In addition to the weakness of pre-service preparation of teachers, in-service preparation has also been cited as a major factor in the concern for the quality of instruction available. (56) However, recent literature appears to provide more information on in-service training opportunities than pre-service opportunities. (58, 75, 7)

Katz (45, p. 105) has labeled the teacher shortage as one of the major problems in providing educational opportunity for the retarded adult. He observes:

> . . . A second problem is the shortage of teachers training to work with mentally retarded adults. While it is hoped that such training will be available, it has not as yet been instituted to this writer's knowledge. . . .

CHAPTER IV

PROGRAMS AND CURRICULA

Programs and curricula available to retarded adults appear to adequately reflect the status of the field as well as the philosophical and pragmatic foundations. Currently, retarded adults may be found in a variety of institutional arrangements from the large state hospital to the open adult basic education class in the community. There appears to be no one factor that determines the institution serving a particular individual. Varying state and local policies based on different attitudes, philosophies and economies intermix in such a way as to make generalization about programs and curricula difficult. However, the literature does appear to suggest trends.

Expectations

Retarded adults have been classified (5) as profoundly retarded, severely retarded, moderately retarded, and mildly retarded. Other classifications employed are the more able mentally retarded, less able, and the least able mentally retarded. (45) Accordingly, certain learning and performance capabilities have been suggested for individuals in each of these categories. Expectations of such capacities and abilities are illustrated in Table 2.

Table 2
Learning Capacities With Degree of Retardation*

Level	Profound	Severe	Moderate	Mild
Adult Social and Vocational Adequacy	Some may walk, some need nursing care, have primitive speech; usually benefits from regular physical activity; incapable of self maintenance. Many learn basic self-care if taught.	Can conform to daily routines and repetitive activities; needs continuing direction and supervision in protective environment.	Can perform simple tasks under sheltered conditions; participates in simple recreation; travels alone in familiar places; usually incapable of self maintenance.	Can usually achieve social and vocational skills adequate to self maintenance; may need occasional guidance and support when under unusual social or economic stress.

*From Gerard J. Bensberg (ed.), Teaching the Mentally Retarded (Atlanta, Ga.: Southern Regional Education Board, 1965), p. 23.

More able retarded adults (45) are those adults who have been evaluated by vocational rehabilitation services and identified as being able to become gainfully employed if proper training is provided. In contrast the less able retarded adults are those adults who have been evaluated to be ineligible for further vocational rehabilitation service because they could not be gainfully employed. And, finally, the least able are those retarded adults who are so severely retarded that they are not capable of engaging in productive work of any kind, or who are capable of doing only the simplest types of work for very short periods of time.

The kinds of programs and curricula available to the retarded adult should theoretically reflect his classification. This is only theoretical since there are few communities (45) where a full range of services is available. In other cases the least able, the profoundly retarded and the severely retarded may be committed to a state hospital where no educational opportunities are available. However, since the theoretical dimension appears to have

influenced the development of day care centers, activity centers and workshops in certain communities and since these agencies appear to be increasing in numbers, (17) the descriptive literature may be instructive.

Sheltered Workshops

Sheltered workshops are designed primarily for what Katz has called the more able retarded. These community facilities offer specialized services to handicapped persons, including work evaluation, work adjustment, work training, personnel counseling, work experience, job placement and follow-up. The workshop usually embraces a wide variety of agencies engaged in different kinds of work such as salvage operation, contract work for other businesses and industry, prime manufacturing and service occupations. Some workshops include all kinds of handicapped persons ranging from the most able to the least able while others are limited to a single category.

In 1965 a total of 787 workshops for the handicapped were certified by the U. S. Department of Labor. Redkey in Meyen (55, p. 181) predicted that the number will increase to 2,000 within a few years.

Generally and philosophically the workshop, as opposed to day care centers and service centers, are transitional agencies. The program should contribute to the movement of disabled people into, through, and out of it into competitive employment. (55) However, there is the recognition of the need for an extended employment workshop that serves an increasing number of handicapped people who cannot move into open competitive industry.

Activity Centers

In contrast to the workshop, the activity center conceptually serves the needs of the less able and least able mentally retarded. It is sometimes, unfortunately, confused with the workshop. But, according to Redkey (55) it

would be much simpler if an activity center were defined "as a community-supported facility offering purposeful activity for the disabled--a place where wages are not paid and products are not produced for sale in commerce."

Katz (43) has described activity centers as community programs where predominately recreational and socialization activities are provided for the least able retarded adults on a regular basis. The major emphasis includes music, drama, arts and crafts, dancing, trips and day camping. The program stresses independence, self-care, motor skills and improvement in communication skills. Emphasis is on achieving better social relationships with other persons in the program, with others in the home, and with others in the community.

Day Care Centers

These community agencies appear to be almost identical to the activity center. Clients are from the least able retarded group and the program as described by Kalmans (41) is very similar to the program of the activity center.

Curricula

The curricula suggested for, and provided to, the retarded adult generally reflects the missions of the workshops, activity centers and the Vocational Rehabilitation Administration. (32, 35, 78) Curricula generally described for the more able and sometimes the less able adult is based on motor skill development and occupational training. Peck (65) severely questions some existing curricula based on reading and arithmetic skills because such skills do not assist the retarded person competitively in an employment setting. He says: (p. 69)

> Ironically, this antiquated approach, the teaching of interesting but relatively useless skills still dominates the thinking of too many of those responsible for the preparation of the retarded for adulthood. It appears to be based upon impractical, unrealistic, hope-dominated goals held by the parents and reinforced by improperly trained special teachers and supervisors who cling to the fuzzy conviction that somewhere in the wornout pages of reading and arithmetic textbooks lies the magic key to an adult retardate's success. On the erroneous assumption that their pupils will be competing with adults of average ability, they strive to provide them with vacuous academic facts, rote learned and rapidly forgotten.

Peck favors a work-study program that simultaneously involves participation of school and rehabilitation personnel and part-time work while the learner devotes part-time to learning specific work skills.

The curricula of the activity centers is based on developing the simplest adult living skills. (17) These activities include self-care, grooming, useful home skills, academics, recreation, community skills, communication and crafts.

Other learning activities include food preparation and speech therapy. (83)

Lance (50) has suggested needed curriculum shifts and emphases to provide the following: (a) perceptual-motor training, physical education and recreation; (b) language development; (c) social-perceptual training; (d) self-help skills; (e) vocational training; and (f) music and art.

Smith (77) suggests the need for curricula concern with (a) marriage and matters related to parenthood, (b) adult education, (c) social and recreational programs. Concerning adult education he elaborated: (p. 299)

> The mildly retarded, especially, can profit from adult education in specific areas. Many larger communities have the resources and inclination to provide evening instruction for adults in subjects that range from those that are very job specific and difficult to others which are broader in scope and offer general information and counsel on subjects involving daily living practices. These courses are very often offered by the public schools, libraries, Young Men's Christian Association (YMCA), Young Women's Christian Association (YWCA), certain employers, community groups, and church organizations.

Katz (45) has pointed out that adult education is available to all adults, including the mentally retarded. However, such instruction appears to generally be provided in open community institutions such as the public schools; and as a result the retarded adult who enrolls participates with the general population and, according to Katz, not without some difficulty. He compares the situation with placing the retarded child in the regular classroom, currently a practice being heatedly debated pro and con. He suggests an alternative is to set up special classes for retarded adults but this often proves unacceptable because of limited enrollment and related problems. Finally, he suggests an approach, used in communities, that provide adult education teachers to sheltered workshops. According to Katz, the earliest report of such a cooperative arrangement was from San Francisco in 1953.

Other Program Needs

The literature indicates that the programs described earlier fail to meet all the important educational needs of the retarded adult or either fail to meet the needs of specific populations within the retarded category.

Katz (45), for example, raises the question: "Why should . . . retarded young adults not be provided with junior college courses of adult education at a time in their lives when they may be most ready for such training?"

In addition he says that there is no community in the United States which adequately serves more than a fraction of its retarded adults.

In those communities where educational provisions are made for retarded adults there is little recognition among adult education administrators that it is necessary to teach the adult retarded in small classes, a fact which is not only recognized but allowed for in the elementary schools and high schools.

Christmas (14) suggests that many of the services to retarded adults are second-class services to people perceived to have second-class problems.

As a result she suggests a modification of the value hierarchy is necessary before mental health centers can provide effective services.

Finally, Riley and Fellen (69) suggest that the War on Poverty activities of selected Community Action Agencies were inadequate in attacking mental illness. The implications are that such agencies could have successfully served as referral agencies for retarded adults needing education, health and related services.

CHAPTER V

CONCLUSIONS

The following conclusions are based on the literature identified and reviewed in this study:

1. Most retarded adults can profit from educational opportunities. These opportunities are currently limited because of funding problems that are related to questions of net social and economic worth.

2. The trend is toward providing additional facilities and programs at the community level. The success of these activities will probably have significant impact of policy and budgeting decisions at the federal and state levels.

3. Information on instructional techniques for use with retarded adults is extremely limited and the success or failure referred to above may be directly related to additional activity in this area.

4. Teacher preparation programs for teachers of retarded adults appear to be extremely limited. The success or failure of decentralized facilities will undoubtedly be directly related to teacher preparation activity.

5. Contemporary curricula and program activities are heavily weighted in favor of vocational rehabilitation.

6. Vocational rehabilitation services should be made available when necessary to all retarded adults in the community regardless of vocational potential.

7. The mentally retarded adult is a forgotten human being in many states. If he is not a welfare recipient or an institution resident, he is

likely to be eking out a subsistence-level existence through work on the very margins of the economy. Few states or communities have an adequate range of workshop, activity or recreational programs for the adult retarded living in the community, and fewer still have effective, on-going counseling resources. (66, p. 20)

REFERENCES

1. Albee, George W. "Let's Change Our Research Priorities in Retardation." JOURNAL OF SPECIAL EDUCATION 4: 2 (1970), pp. 139-147.

   Albee argues convincingly that the "retarded" population should be viewed as normal individuals who have less than average intelligence. He suggests that 2.5 percent of the population should fall into this category. Such a phenomenon is consistent with statistical concepts and laws of genetics. Albee suggests that such a distribution of people is caused by "polygenes," the additive, cumulative or interactive effects of a number of different genes which in varying combination produce inherited characteristics.

2. Arkansas State Department of Education. CURRICULUM GUIDE: EDUCABLE MENTALLY RETARDED. Little Rock: Arkansas State Department of Education, 1968. EDRS Order Number ED 033 494. (HC $9.87)

   This guide emphasizes social and economic growth of the educable retarded secondary student. Provision is made for lesson and unit plans that give information on vocational and educational opportunities and which develop habits, attitudes and skills necessary for the individual to hold a job. The basic skills to be taught, books and materials useful in presentations, and suggestions and teaching aids for enrichment are given for grades 10, 11, and 12. Included in the sequential social studies units are American history and government, job skills, driver training, map skills and world geography. Activities are suggested for each grade in functional English, functional mathematics, and functional science. Grade 10 includes a unit on home economics skills with emphasis on human development and family, food and nutrition, housing, and textiles and clothing. Units for grade 12 include a pre-vocational orientation which prepares the student for employment interviews, job skills and work attitudes. An appendix gives a dictionary of vocational vocabulary along with sample forms of employment application, social security cards, wage comparisons for various occupations and checking account statements.

3. Albizu-Miranda, Carlos, et al. THE SUCCESSFUL RETARDATE. Puerto Rican Division of Vocational Rehabilitation, HATO REY. Vocational Rehabilitation Administration (DHEW), Washington, D. C. P-RD-1158-P, March, 1966. 137 p. EDRS Order Number ED 027 650. ($6.58 HC)

   To study the prevalence of mental retardation in Puerto Rico, the proportional distribution of successful retardates, and the processes accounting for success and failure, a random sample of 4,771 adults between the ages of 23 and 49 was screened by the Stanford Binet Form L and a vocabulary test. From this sample the estimated retardation rate

for Puerto Rican adults was 31 percent. Success was measured by comparing the average income of male retardates with incomes of other males in the same community; those in the lowest 20 percent were considered unsuccessful. The proportion of successful retardates was dependent on the complexity of the community: in peasant communities 78 percent were successful while in urban non-slums this was reduced to 60 percent. Intelligence and education contributed to the probability of success, especially for those with I.Q.'s of 85 or above; however, in urban areas retardates with 4 years or less of school had a failure rate of 50 percent while for those with more schooling the rate was 30 percent. Over 60 percent of respondents had a positive self-image although normals and successful retardates showed more positive self-image ($p = .05$). Most retardates resulted from cultural deprivation.

4. Baumeister, A. A. (ed.) MENTAL RETARDATION: APPRAISAL OF EDUCATION AND REHABILITATION. Chicago: Aldine Publishing Co., 1967.

5. Bensberg, Gerard J. (ed.) TEACHING THE MENTALLY RETARDED. Atlanta: Southern Regional Education Board, 1965. 7th Edition.

   TEACHING THE MENTALLY RETARDED is designed as a handbook for ward personnel. It contains many ideas generated by one of the SREB Attendant Training Project Committee. While designed principally for ward attendants in children's institutions the book contains some useful information for the teacher of mentally retarded adults. Contains 195 pages; glossary, additional reading list, bibliography and developmental checklist.

6. Best, Harry. PUBLIC PROVISIONS FOR THE MENTALLY RETARDED IN THE UNITED STATES. Worcester, Mass.: Hefferman Press in conjuntion with Thomas Crowell Co., 1965.

7. Bower, Libbie B. "An Inservice Program for Mental Health." CHILDHOOD EDUCATION, 30: 9, (May, 1954), pp. 419-422.

   Over a period of a half-dozen years, the Massachusetts Association for Mental Health tried to help teachers achieve not only an optimal level of professional functioning, but also to sharpen their awareness of the preventive aspects of their role as classroom teachers. This program included college credit courses in mental health, inservice mental health workshops which were problem centered and did not deal with theoretical or intellectual concepts, and problem-centered seminars led by psychiatrists.

8. Burr, Helen G. "The Aphasic Adult; Evaluation and Rehabilitation." Charlottesville, Va.: University of Virginia, Department of Speech Pathology and Audiology Research Laboratory, 1964. EDRS Order Number ED 040 388. (HC $6.58)

The purpose of the course on aphasia in adults, from which these proceedings resulted, was to increase the knowledge and skill of professional persons who are actively engaged in the areas of aphasia: in research, rehabilitation or teaching. The course was jointly sponsored by the University of Virginia and the Vocational Rehabilitation Center on December 3-6, 1963. The first section of this compilation, "The Nature of Aphasia," contains papers by J. Eisenson, W. G. Hardy, H. Goodglass, W. E. Castle, and W. Reise. The second section, "The Evaluation of the Aphasic Adult," contains papers by F. Dreifuss, J. Eisenson, J. Lore, and H. Goodglass. "The Treatment of the Aphasic Adult," the third section, contains papers by C. Reedy, J. H. Allen, R. M. Hoover, H. Goodglass, J. Eisenson, P. Breeding, M. Taylor, and R. Stoudt, and a joint evaluation of progress by J. Eisenson, W. G. Hardy, and M. Taylor. "Directions in Research on Aphasia," the final section contains commentaries by F. Dreifuss, H. Goodglass, M. Taylor, W. G. Hardy, and J. Eisenson. A roster of participants concludes the proceedings. [Not available in hard copy due to marginal legibility of original document.]

9. California State Department of Education. "The Undeveloped Resource: A Plan for the Mentally Retarded in California, Report to the Governor and Legislature." BULLETIN OF THE CALIFORNIA STATE DEPARTMENT OF EDUCATION, Vol. XXXIV, No. 1, March, 1965.

10. California State Department of Education. "Vocational Education For Persons With Special Needs." Sacramento, 1966, EDRS Order Number ED 011 929. (HC $3.29)

A survey of research was made to identify the vocational needs of individuals with special problems, completed studies, research-in-progress, and current proposals were included. Topics covered in this summary are (1) aging, (2) continuation education, (3) the culturally deprived, (4) delinquency, (5) dropout, (6) emotional disturbance, (7) low ability, (8) mental retardation, (9) minority racial groups, (10) physically handicapped students, (11) small schools, (12) socioeconomic studies, (13) underachievers, and (14) work opportunities. A bibliography is included.

11. California State Department of Public Health. "California State Plan for Facilities for the Mentally Retarded," July 1, 1968--July 30, 1969. Sacramento: California State Department of Public Health, 1969, 258 p. EDRS Order Number ED 033 511. (HC $9,87)

This document was written to aid in the development and improvement of facilities for the mentally retarded in California. The guide describes the organization of the State Department of Public Health, and presents the laws relating to hospital survey and construction. Further information is provided concerning the State Advisory Hospital Council, methods of administration, general policies, the construction program and state standards for maintenance and operation. Also are considered priority date, the short range program, general characteristics of the state, individual county information, and public school special education services for the educable and trainable retarded.

12. Cegelka, Walter J., and DiLeonardo, Michele. A SELECTED BIBLIOGRAPHY ON EDUCATION OF THE MENTALLY RETARDED. Austin, Texas: National Association for Retarded Children, n. d.

This is a 35-page document with seven major topical divisions, mental retardation--nature and needs, education of the mentally retarded--general, elementary school education, adult services, subject areas, education of special groups of mentally retarded children. The bibliography in each section is divided into two categories: books and articles. The adult service section contains only six references.

13. Chouinard, Edward L. and Garrett, James F. (eds.) WORKSHOPS FOR THE DISABLED; A VOCATIONAL REHABILITATION RESOURCE. Washington, D. C.: U. S. Government Printing Office, 1956.

14. Christmas, June Jackson. "Obligation to High Priority Target Groups: Philosophical Implications." Bethesda, Maryland: National Institute of Mental Health, April, 1968. EDRS Order Number ED 035 050. (HC $3.29)

15. Clarke, Ann Margaret and Clarke, A. D. B. (eds.) MENTAL DEFICIENCY: THE CHANGING OUTLOOK. New York: The Free Press, 1965.

16. Council for Exceptional Children. CEC SELECTED CONVENTION PAPERS: ANNUAL INTERNATIONAL CONVENTION: MENTAL RETARDATION. Washington, D. C., 1968. 38 p. CEC Selected Convention Papers from the Annual International Convention (46th, New York City, April 14-20, 1968). Available from the Council For Exceptional Children, NEA, Washington, D. C. ($2.00), HC not available for EDRS. EDRS Order Number ED 031 863.

The articles on mental retardation included in this publication are: translating research findings into classroom activity: compiling programs: a measurement device for educable mentally retarded adolescents on their self-concept as a worker: an investigation of the Doman-Delacato Theory in a trainable program in the public schools: and problems of sex education for educable mentally retarded. Abstracts of articles treat these topics: camping: using sight, sound, and symbol to develop learning abilities: a rehabilitative culture design for moderately retarded adolescent girls: remediation of psycholinguistic disabilities: milean therapy for parents: developing teacher-made instructional materials: language development instructional aids in the trainable program: centralized facilities: a program for public school integration: audiovisual instruction techniques: good practice conference for teachers: segregation: and parent-teacher communication.

17. Cortazzo, Arnold D. "An Analysis of Activity Programs For Mentally Retarded Adults." MENTAL RETARDATION, 3, 1968, pp. 31-34.

18. District of Columbia Department of Public Health. COMPREHENSIVE MENTAL HEALTH PLAN: FINAL REPORT OF MENTAL RETARDATION COMMITTEE. Department of Mental Health, Washington, D. C., 1969, 115 p.

Reports concerning mental retardation in Washington, D. C. include the following: an introduction and assessment of the problem; programs and resources available and being planned; recommendation of the mental retardation committee; commentary on prevention and related services; suggested roles and functions of four anticipated mental retardation centers; and problems in implementation.

19. DiMichael, Salvatore G. (ed.) VOCATIONAL REHABILITATION OF THE MENTALLY RETARDED. Washington, D. C.: U. S. Government Printing Office, 1950.

20. Doll, Eugene E. "Trends and Problems in the Education of the Mentally Retarded: 1800-1940." AMERICAN JOURNAL OF MENTAL DEFICIENCY, 72, (Sept., 1967), pp. 175-183.

Early practices in the use of the developmental approach, sensory-motor stimulation, concrete and practical instruction, social and vocational training are briefly detailed. Early innovations noted are on-the-job training, the use of the M.A. in educational placement and vocational prognostication, and differential education for retardates vs. defectives. The positive value of personal adjustment was early recognized, but methods for improving social behavior varied. The rise of differential diagnosis, remedial procedures, diagnostic teaching, comprehensive community plans, the wider use of units, the educational implications of exogenous damage, and adaptations for use in rural areas are traced.

21. Drew, Clifford J. and Espeseth, Vernon K. "Transfer of Training in the Mentally Retarded: A Review." EXCEPTIONAL CHILDREN, 35, (Oct., 1968), pp. 128-133.

Reviews research concerning transfer of training. Review suggests an increase in transfer occurs when (a) the retardate is relatively young; (b) a high similarity exists between tasks, such that a substantial amount of the training can be transferred as a unit; and (c) meaningful pre-training of a general and varied nature is provided. The general nature of the verbal instruction provided the retardate also seems to influence transfer performance.

22. Dy[illegible]. "Rehabilitation for the Adult Retardate." AMERICAN JOURNAL OF PU[illegible] HEALTH, 51 (1961), pp. 998-1004.

23. Egg, Marie. EDUCATING THE CHILD WHO IS DIFFERENT. New York: Day, 1968.

24. Ellis, N. R. (ed.) HANDBOOK OF MENTAL DEFICIENCY. New York: McGraw-Hill Book Co., 1963.

25. Farmington State College. SPECIAL EDUCATION BULLETIN OF FARMINGTON STATE COLLEGE, 4, 1, 1966. EDRS Order Number ED 012 997 (HC $3.29)

Listing about 570 items, this bibliography represents the mental retardation collection at Mantor Library, Farmington State College. Items are listed by Dewey Decimal Classification Number or vertical file number and include curriculum and teacher guides, program descriptions, parent handbooks, conference proceedings, directories, research reports, journal articles and others ranging in publication date from 1907 to 1966. All levels of mental retardation and all age levels are included. This bulletin is the first in a series cataloging the library's holdings in special education.

26. Fester, C. B. and Perrott, N. C. BEHAVIOR PRINCIPLES. New York: Appleton-Century-Crofts, Inc., 1968.

27. Fraenkel, William A. THE MENTALLY RETARDED AND THEIR VOCATIONAL REHABILITATION. New York: National Association for Retarded Children, 1961.

28. Gardner, W. I. and Nisonger, H. W. "A Manual on Program Development in Mental Retardation." MONOGRAPH SUPPLEMENT TO THE AMERICAN JOURNAL OF MENTAL DEFICIENCY, 66, 1962.

29. Goldstein, Herbert. "Social and Occupational Adjustment." In Harvey A. Stevens and Rick Heber (eds.) MENTAL RETARDATION: A REVIEW OF RESEARCH. Chicago: University of Chicago, 1964.

30. Goreleck, Jack and Tobias, Jack. WORK CHARACTERISTICS OF RETARDED ADULTS AT TRAINABLE LEVELS. New York: New York Association for the Help of Retarded Children. n.d.

31. Gladis, Michael and Minton, Jenry. "Job Incentive Preferences of Emotionally Disturbed Patients." JOURNAL OF COUNSELING PSYCHOLOGY, 9, 1, 1962. EDRS Order Number ED 011 929. (HC $3.29)

32. Gragert, H. T. WORK-CITIZENSHIP PREPARATION SERVICES FOR MENTALLY RETARDED ADULTS, A REPORT ON SELECTED DEMONSTRATION PROJECT 278. Kansas City, Mo.: Goodwill Industries, 1962. EDRS Order Number ED 027 660.(HC $6.58)

This document describes an experimental vocational rehabilitation program for the mentally retarded (Mean I.Q. 65.8, mean level of academic achievement, 3rd grade) that was conducted by Goodwill Industries from

December, 1958, to November, 1962. Of 371 clients who were evaluated for occupational, academic, and vocational abilities, 337 completed the full diagnostic phase of the program. Clients lived at home or in a boarding home; in addition to job skills they were trained in family living, personal hygiene, conduct, citizenship, and work attitudes. Jobs were broken into separate tasks; clients received tryouts in from three to seven work areas and were evaluated in each. A number of trainees received on-the-job training at other agencies. Ninety-six or 28.5 percent of the trainees were dropped from the program primarily because of behavioral disturbances that could not be resolved in the scope of the program. Of those who completed evaluation, 33 were placed in competitive jobs, three were recommended for further diagnosis, 26 for training in trade schools, and 179 for training in Goodwill Industries. Results indicate that the mentally retarded can successfully be trained to be employable and to live satisfactorily in the community; additional programs are needed to prevent or alleviate behavior problems which prevent otherwise capable persons from getting and holding jobs.

33. Greenleigh Associates, Inc. INVENTORY OF FEDERALLY SUPPORTED ADULT EDUCATION PROGRAMS: REPORT TO THE PRESIDENT'S NATIONAL ADVISORY COMMITTEE ON ADULT BASIC EDUCATION. New York: Greenleigh Associates, 1968. EDRS Order Number ED 034 913. (HC $6.58)

    Based on a study of 34 federal programs concerned with adult education, it is concluded that a large gap exists between numbers of those who need and those who actually receive adult basic education. The target population intended by Congress is not clear, and this study indicates that a national ABE policy needs further definitions and clarification.

34. Harrison, Preston E.; Davis, Harry G.; and Von Rosenberg, Robert H. "Aides Teach Adult Education Course." HOSPITAL AND COMMUNITY PSYCHIATRY. June, 1968.

    This article describes a program of education for adult schizophrenic patients at Big Springs State Hospital in Texas. Aides were trained and provided indirect assistance from consultants from local school districts and junior colleges. The program is considered to have been successful as 19 attendants were involved in classes at two locations in the hospital plus classes in a transitional unit operated in town, away from the hospital.

35. Harvey, Jasper, and Others. SPECIAL CLASS CURRICULUM AND ENVIRONMENT AND VOCATION REHABILITATION OF MENTALLY RETARDED YOUNG ADULTS. N.P. University of Alabama, Department of Special Education, 1964. EDRS Order Number ED 027 659. (HC $6.58)
    This document describes ten demonstration projects that were established in selected rehabilitation facilities in cooperation with other agencies to serve mentally retarded young adults (ages 16 to 21 years, I.Q.'s 50 to 75). Pupils in special class workshops settings were evaluated by workshop managers, teachers, and rehabilitation counselors. Each project teacher was responsible for orienting the curricula toward the student's

needs based on the area where he lived with the focus on developing social adequacy; consideration was given to the rehabilitation process as an integral function. Procedures for admission, evaluation, counseling, and job training and placement were developed. Sixty-two of the 209 students (29.67 percent) were rehabilitated under the project and were also clients of vocational rehabilitation; 13 were rehabilitated through other means; 24 were in training in school or in sheltered employment; 7 worked part-time; 3 were homemakers; 44 were still in project classes; and 56 were non-rehabilitated. Problems in student selection and recommendation for future vocational programs are discussed; forms and letters used in data collection are provided.

36. Hormuth, Rudolph P. "The Utilization of Group Approaches in Aiding Mentally Retarded Adults Adjust to Community Living." GROUP PSYCHOTHERAPY, VIII, 3, October, 1955. pp. 233-241.

37. Hungerford, Richard H. "The Schooling of the Mentally Retarded--A History and Philosophy of Occupational Education." JOURNAL OF EDUCATION, 147, October, 1964. pp. 5-10.

    Like that of the field's frontiersmen, such as Fernald, Goddard, and Farrell, the philosophy behind Occupational Education is premised upon: (1) the marked difference of the retardate by the time he is placed in the program; and (2) the responsibility of the school to prepare the individual for total living, year-wise as well as day-wise.

38. Huntley, Arthur C. "A Day Program in Treatment and Teaching." MENTAL HOSPITALS, 16, July 7, 1965. pp. 194-196.

    This paper describes the day program for adults at the Eastern Pennsylvania Psychiatric Institute in Philadelphia. The program, in addition to providing an effective treatment plan for approximately 25 patients, offers training experience to psychiatric residents, student nurses, student social workers, and occupational therapy workers. Two psychiatric residents plan programs and take part in role-playing and group therapy, while several student nurses rotate through the unit for six or seven weeks.

39. Illinois Commission for Handicapped Children. COMMUNITY PROGRAMS FOR THE MENTALLY HANDICAPPED YOUNG ADULT. Springfield, Ill.: Interdepartmental Committee on Handicapped Children, 1957.

40. Jacobs, Abraham and Weingold, Joseph T. THE SHELTERED WORKSHOP: A COMMUNITY REHABILITATION RESOURCE FOR THE MENTALLY RETARDED. New York: Bureau of Publications, Teachers College, Columbia University, 1958.

41. Kalmans, Ethel T. "Low-Cost Individual Treatment in a Day Center." HOSPITAL AND COMMUNITY PSYCHIATRY, 21, December, 1970, pp. 30-31.

Kalmans describes the activity programs of the day center in Arlington, Virginia. The program is based on the idea of "growth" providing work; prevocational training (serving, stenographic skills), kitchen and laundry work and beauty care; woodworking, furniture repair, painting, and light machine work. Daily client cost of $7.80 compared with state hospital costs of $36.60.

Assignment to the workshop is almost entirely on the basis of the patients' interest and past work experience. Special care is also given to the young children of clients.

42. Karmer, Leo. A HISTORY OF THE CARE AND STUDY OF THE MENTALLY RETARDED. Springfield, Ill.: Charles C. Thomas, 1964.

43. Katz, Elias. "Rehabilitation Potential For Independent Living of Severely Mentally Retarded Young Adults." MENTAL RETARDATION, 1963, pp. 7-17.

44. Katz, Elias. "An Independent Living Rehabilitation Program For The Seriously Handicapped Mentally Retarded Adults." TRAINING SCHOOL BULLETIN, 61, May, 1964, pp. 34-44.

45. Katz, Elias. THE RETARDED ADULT IN THE COMMUNITY. Springfield, Ill.: Charles C. Thomas, 1968.

This 267-page book is specifically concerned with the adult. The concern includes education and training. Katz provides a general overview of the problems and potentials of the retarded adult. He is generally optimistic about the ability of retarded adults to live more independently in the community, providing necessary services are made available.

46. Kidd, John W. "Some Unwarranted Assumptions in the Education and Habilitation of Handicapped Children." EDUCATION AND TRAINING OF THE MENTALLY RETARDED, 1, April, 1966, pp. 54-58.

47. Knox, Alan B. "Interests and Adult Education." JOURNAL OF LEARNING DISABILITIES, April, 1968, pp. 220-227.

Knox discusses the importance of considering the interests of adults in adult education programming. Such interests appear to be related to opportunities for adult participation. Knox also suggests that adult educators should relate issues and topics to adult interests.

His discussion is concerned with the average or normal adult even though it appears in the JOURNAL OF LEARNING DISABILITIES.

48. Krim, Mathilda. "Scientific Research and Mental Retardation." PCMR MESSAGE, January, 16, 1969.

49. Krop, Harry D. "Education and the Self-Concept of the Mentally Retarded." TEACHER PREPARATION AND TRAINING SCHOOL BULLETIN, 55, August, 1968, pp. 57-64.

50. Lance, Wayne. "Trends in Curricula in Trainable Mentally Retarded." In Espesetli, V. Knute; Matson, Robert; and Berard, Walter R. (eds.) 1967 SPECIAL STUDY INSTITUTE FOR PERSONNEL ENGAGED IN TEACHER TRAINING IN THE AREA OF MENTAL RETARDATION (SELECTED PAPERS). Eugene, Oregon: The University of Oregon, 1968, pp. 58-66.

51. Lavely, Carolyn D. and Lema, David E. "Preparation of Teachers of the Trainable Mentally Retarded--An Experimental Approach." CONTEMPORARY EDUCATION, 42, January, 1968, pp. 117-121.

The author briefly describes the increase in community classes for trainables with the problems associated with the absence of a pool of trained teachers. Negative results of such classes reported in the literature are cited as reasons for improved teacher training programs. The experimental program offered by the authors employs a two lower division professional sequence that would enable teachers to become licensed before earning their bachelor's degree. Other elements of the program are also described.

52. McCandless, B. R. "Relation of Environmental Factors to Intellectual Functioning." In Stevens, H. A. and Heber, Rick (eds.) MENTAL RETARDATION: A REVIEW OF RESEARCH. Chicago: University of Chicago Press, 1964, pp. 175-213.

53. MacMillan, Donald L. "The Problems of Motivation in the Education of the Mentally Retarded." EXCEPTIONAL CHILDREN, 37, April, 1971, pp. 187-200.

One possible reason for the failure to demonstrate the efficacy of self-contained classes for the educable mentally retarded lies in the failure of such classes to balance the emphasis on motivational and cognitive variables. Several motivational variables have been isolated experimentally and the research findings have been interpreted to suggest that children who have experienced excessive amounts of failure dramatically differ from children with little history of failure on these variables. Three specific motivational variables are discussed and the related research evidence presented. The variables are (a) expectancy for failure, (b) out-directedness, and (c) positive and negative reaction tendencies. Implications are drawn and suggestions made regarding ways of dealing with these behaviors.

54. Massachusetts Special Commission on Retarded Children. OUTLOOK FOR THE ADULT RETARDED. Proceedings of the 1960 Woods School Conference, held in cooperation with the Massachusetts Special Commission on Retarded Children, 1960.

55. Meyen, Edward L. PLANNING COMMUNITY SERVICES FOR THE MENTALLY RETARDED. Scranton, Pa.: International Textbook Co., 1967.

An important book of readings concerned with the broad topic of community services for the mentally retarded. Approximately 120 pages are devoted to rehabilitative services that include adults as well as children. Contains an eight-page bibliography.

56. Meyen, Edward L. "A Statewide Approach To Inservice Training For Teachers of the Mentally Retarded." EXCEPTIONAL CHILDREN, 35, January, 1969, pp. 353-357.

This article discusses the Special Education Curriculum Development Center inservice training program for teachers of the mentally retarded that uses experienced special class teachers as inservice educators. These "consulting teachers" are trained to conduct monthly inservice sessions. Curriculum publications are prepared specifically for the field sessions by a staff at the University of Iowa, and an intermediate school district publishes the materials. Coordination is provided by the Iowa Department of Public Instruction. The purpose of the training program is to establish an ongoing inservice program which utilizes the teachership talents of teachers and which focuses on concerns relevant to their needs.

57. Milgram, N. A. "The Relationship of Language to Cognitive Performance With Special Reference to the Mentally Retarded," in PERSPECTIVES IN THEORY AND PRACTICE: SELECTED CONVENTION PAPERS. Washington, D. C.: The Council for Exceptional Children, 1963, pp. 171-175.

58. Moorhead, Jeunelle. "Mental Health Inservice Training for Teachers." JOURNAL OF SCHOOL HEALTH, 26, 3, March, 1966, pp. 103-108.

59. Morse, William C. and Dyer, Calvin O. "The Emotionally and Socially Handicapped." REVIEW OF EDUCATIONAL RESEARCH, 33, 1, pp. 109-125. EDRS Order Number ED 011 929.

A review of 145 studies of emotionally disturbed viz occupation and vocational needs has been conducted by Morse and Dyer (1963).

60. Myers, Patricia I. and Hammill, Donald D. METHODS FOR LEARNING DISORDERS. New York: John Wiley and Sons, 1969.

61. National Association for Retarded Children. POLICY STATEMENTS ON THE EDUCATION OF MENTALLY RETARDED CHILDREN, April, 1971.

62. New York Association for the Help of Retarded Children. A SHELTERED WORKSHOP OPERATION FOR THE MENTALLY RETARDED. N.D.

63. Nitzberg, Jerome. "Some Different Emphases in the Role of the Social Worker in a Workshop for Mentally Retarded Adolescents and Young Adults." JOURNAL OF MENTAL DEFICIENCY, 63, 1, July, 1958.

64. Peck, John R. and Others. "Personality and Success Profiles Characteristics of Young Adult Male Retardates." Austin, Texas: University of Texas, 1964. EDRS Order Number ED 003 460. (HC $3.29)

It was found that efficiently performing, socially oriented, satisfied retardates performed well in vocational, sociocivic and personal success areas. Failure performance was characterized by rebellious attitudes, unemployment, and critical regard for others. Physical well-being and desirable self-concepts were closely related in the personality syndromes of retardates, and this relationship was suggested for further exploration.

65. Peck, John R. "The Work-Study Program--A Critical Phase of Preparation." EDUCATION AND TRAINING OF THE MENTALLY RETARDED, 1, April, 1966, pp. 68-73.

Work-study programs for mentally retarded adolescents, in which retarded youths are trained intensively for adult roles both in the classroom and on the job, are becoming recognized as critically important in the education-rehabilitation process. Communities without such services cannot adequately provide the help the retardate needs to bridge the chasm between childhood schooling and adult responsibilities. This article is devoted to a discussion of the philosophy indulging the work-study approach, as well as examples from Wisconsin, Texas, and Alabama on the studies of the method. Work-study develops three important dimensions: vocational skills, sociocivic responsibility, and self-image.

66. President's Committee on Mental Retardation. THE DECISIVE DECADE. Washington, D. C.: U. S. Government Printing Office, 1971.

67. President's Committee on Mental Retardation. ENTERING THE ERA OF HUMAN ECOLOGY. Washington, D. C.: U. S. Government Printing Office, 1972.

68. Price, James E. "Automated Teaching Programs With Mentally Retarded Students." AMERICAN JOURNAL OF MENTAL DEFICIENCY, 68, July, 1963, pp. 69-72.

This article briefly describes an experiment designed to explore the efficiency of automated teaching with students who are within the range of mental retardates. Two methods of presenting the material were investigated, answer-construct that requires that the answer be constructed or written in. The second, multiple choice, requires that the correct answer be chosen and marked. A comparison of the difference between pre- vs.

post-test scores indicated there were no significant differences between the groups regarding amount learned with the exception of subtraction as learned by the multiple choice machine group. The two machine taught groups required considerably less time when compared with the conventional teaching group.

69. Riley, John M. and Fellen, Phillip A. "Is the War on Poverty Attacking Mental Illness." New York: American Orthopsychiatric Association and University of Michigan School of Social Work, 1970. EDRS Order Number ED 038 720. (HC $3.29)

Abstract--Taking as indisputable the relationship between poverty and mental illness, this paper examines the effect which the War on Poverty could have upon mental illness. Community Action Centers are the specific focus, with their potential for serving low income clients with emotional problems and functioning as case finders and referral sources for mental health agencies. Data were collected from four centers in a large urban area over a period of two years. The centers were scrutinized with respect to the function of their Interviewing and Counseling Units: (1) Information/ Reception, (2) Intake, (3) Referral, and (4) Follow-up. In addition, research involved observation of counselor/client transaction, abstraction of information from case files and surveying of counselor perspectives. Deficiencies were found in: (1) information and decision making systems, (2) operational patterns, and (3) relationships of the centers to their external environment. Findings suggest that Community Action Centers are not recognizing and treating mental health problems and are not serving as case finders or referral sources for mental health agencies. Implications for these agencies are discussed.

70. Rocky Mountain Educational Laboratory, Inc. "Individual Learning Disabilities: A Bibliography." Greeley, Colo., 1968. EDRS Order Number ED 034 340. (HC $3.29)

The bibliography contains a variety of subject matter focusing on, but not necessarily limited to, the topic of learning disabilities. Included are 351 articles dating from 1959 to 1968, 148 books ranging from 1926 to 1968, 60 booklets from 1956 to 1968, 37 testing materials dating from 1955 to 1967, 42 catalogs from 1967 to 1968, 36 video tapes, 26 audio tapes, 11 bibliographies, 10 directories, 12 films and 4 records.

71. Roos, Philip. "Trends and Issues in Special Education for the Mentally Retarded." EDUCATION AND TRAINING OF THE MENTALLY RETARDED, 5, April, 1970, pp. 51-61.

72. Rosenblum, Gershen. "Citizen Participation and Influence in Comprehensive Mental Health/Retardation Programs: Real or Apparent?" New York: American Orthopsychiatric Association and Massachusetts Department of Mental Health, 1970. EDRS Order Number ED 041 297. ($3.29)

Abstract--Increasingly, mental health professionals are turning for support and assistance in their work to citizens in the community. Consequently, the roles of citizen groups as participants and collaborators have taken on increased significance. These citizens are asking, "How much influence will they be allowed to exert in planning and implementing community mental health programs?" This paper illustrates the issue by discussing the experience and problems faced by legally authorized citizen area boards in Massachusetts since 1967 when a law reorganizing the Department of Mental Health went into effect to provide more effective comprehensive mental health and mental retardation services across the state. The composition of the boards is described and legal provisions concerning their duties and powers are elaborated. The findings of a study conducted by the Department of Mental Health to ascertain area board involvement and concomitant problems and goals are discussed. Questions raised by the survey relate to: (1) power, (2) leadership, (3) community control, (4) money, (5) intergroup reconciliation, (6) planning, and (7) philosophies of service delivery versus community and social change. A discussion about the future of citizen area boards in Massachusetts concludes the paper.

73. Saenger, Gerhart H. THE ADJUSTMENT OF SEVERELY RETARDED ADULTS IN THE COMMUNITY. Albany, New York: New York State Interdepartmental Health Resources Board. N.D.

74. Shank, Jack. "ABE Classes For Mentally Ill--A New Dimension for Adult Education." ADULT LEADERSHIP, 21, 6, December, 1972.

75. Shubert, O. Wendell and Fulton, Robert T. "An Inservice Training Program on Communication." MENTAL RETARDATION, 4, 1, February, 1966, pp. 27-28.

    A program for teaching communicative skills to aides and nurses working with delayed language retardates at Ft. Wayne State Hospital and Training Center is described. The trainees had two half-hour meetings per week for 26 weeks. Discussion, demonstration and ward experience were the major methods used.

76. Smith, Robert M. CLINICAL TEACHING: METHODS OF INSTRUCTION FOR THE RETARDED. New York: McGraw-Hill Book Co., 1968.

77. Smith, Robert M. AN INTRODUCTION TO MENTAL RETARDATION. New York: McGraw-Hill Book Co., 1971.

    A 272-page book that provides a good introduction to care and services provided to mentally retarded of all ages. One chapter is specifically devoted to adults.

78. Sniff, William E. A CURRICULUM FOR THE MENTALLY RETARDED YOUNG ADULT. Springfield, Ill.: Charles C. Thomas, 1962.

79. Southeast Regional Special Education Service Center. AN EXPERIMENTAL CURRICULUM GUIDE FOR TEACHERS OF THE TRAINABLE MENTALLY RETARDED. Downey, Calif.: Southeast Regional Special Education Service Center, 1968. EDRS Order Number ED 029 424. (HC $3.29)
This is an experimental curriculum guide for the trainable mentally retarded of all ages that uses activities sequenced in order of difficulty. The unit on self-understanding and self-care treats physical self and personal care; the communication unit covers language development and observational and listening skills; the social competence unit considers self-discipline, social amenities, respect for other people and property; and on sensory and gross and fine motor skills. Further units are on quantitative concepts, with number concepts and practical application; practical skills, with homemaking, shop, custodial, and outdoor skills; and recreational skills with self-motivation and leisure time. In all units, objectives are listed with techniques and activities suggested and materials and references provided.

80. Stephens, Will Beth. "Piaget and Inhelder--Application of Theory and Diagnostic Techniques to the Area of Mental Retardation." EDUCATION AND TRAINING OF THE MENTALLY RETARDED, 1, April, 1966.

81. Stevens, Harvey A. and Heber, Rick (eds.) MENTAL RETARDATION: A REVIEW OF RESEARCH. Chicago: University of Chicago, 1964.

This publication provides an extensive review of research concerned with mental retardation and was authorized by the American Association on Mental Deficiency, Project on Technical Planning in Mental Retardation. Thirteen different areas of research are reported. The value of the publication to adult educators is based on the need for a general awareness of the research in mental retardation. Specific studies dealing with the adult retardate are extremely limited and the manuscript organization provides little opportunity for easy retrieval.

82. Strickland, Conwell G. and Arrell, Vernon M. "Employment of the Mentally Retarded." EXCEPTIONAL CHILDREN, 34, September, 1967, pp. 21-24.

A survey was made of the records in the state office of the Director of Vocational Rehabilitation to determine the extent to which educable retarded youth found employment on jobs for which they were trained in the Texas statewide Coop. Program of Special Education in the public schools. Records for a 26-month period provided the data. A total of 1,127 (787 male and 341 female) out of 1,405 (977 male and 428 female), or 80.2 percent, secured employment on a job for which they were trained. The difference between male and female students was less than one percentage point.

83. Tobias, Jack and Cortoazzo, Arnold D. "Training Severely Retarded Adults For Greater Independence in Community Living." TRAINING SCHOOL BULLETIN, LX, 1, 1963, pp. 23-37.

84. Tobias, Jack. "Vocational Adjustment of Young Retarded Adults." MENTAL RETARDATION, 8, 3, June, 1970.

85. Towns, Elmer L. and Groff, Roberta L. SUCCESSFUL MINISTRY TO THE RETARDED. Chicago: Moody Bible Institute of Chicago, 1972.

A small paperback of nine chapters devoted to religious questions concerning the mentally retarded. Two chapters are of concern to the educator: How Do the Mentally Retarded Learn, and What Teaching Methods Should Be Used. The book's main emphasis is upon children, however, occasionally a general statement equally applicable to adults is found. The book is basic and therefore may be limited in utility for the more sophisticated reader. A lengthy bibliography and reference list is included.

86. U. S. Department of Health, Education and Welfare. THE MENTALLY RETARDED--PROGRESS IN THEIR REHABILITATION, SELECTED ARTICLES FROM BACK ISSUES OF THE REHABILITATION RECORD. Vocational Rehabilitation Administration. N.D., N.P.

87. U. S. Department of Health, Education and Welfare, Secretary's Committee on Mental Retardation. THE PROBLEM OF MENTAL RETARDATION. Washington, D. C.: U. S. Government Printing Office, N.D.

88. U. S. Department of Health, Education and Welfare, Secretary's Committee on Mental Retardation. DIRECTORY OF STATE AND LOCAL RESOURCES FOR THE MENTALLY RETARDED. Washington, D. C.: U. S. Government Printing Office, December, 1969. EDRS Order Number ED 038 784. (HC $6.58)

This article includes a checklist of state and local agencies, facilities, and other resources which render specific services to the mentally retarded. For each of the states and territories, the following are identified: state coordinating agencies, state agency administered programs, non-government state resources, clinical programs, and residential and special facilities.

89. U. S. Department of Health, Education and Welfare. MENTAL RETARDATION FINANCIAL ASSISTANCE PROGRAMS OF THE DEPARTMENT OF HEALTH, EDUCATION AND WELFARE. Washington, D. C.: U. S. Government Printing Office, 1971.

This 70-page document describes the varied mental retardation programs of the DHEW that range from support of a community day care center to construction of a complex diagnostic and evaluation facility. It attempts to describe in summary from the financial aspects of programs concerned with mental retardation.

90. U. S. Department of Health, Education and Welfare. PROFILES OF GRANT PROGRAMS. Washington, D. C.: U. S. Government Printing Office, 1971.

This 100-page publication provides information on grant programs of the Health Services and Mental Health Administration of DHEW. These programs have as their common mission the improvement of health care available to the American people in terms of equitable accessibility, quality and efficiency.

91. U. S. Office of Education. DIRECTORY OF PROGRAMS FOR THE EDUCATION OF HANDICAPPED CHILDREN IN THE UNITED STATES OFFICE OF EDUCATION. Washington, D. C., January, 1969. EDRS Order Number ED 027 695. (HC $3.29)

Information is provided regarding programs for the education of handicapped children in the U. S. Office of Education. Arranged by administrative agencies, these programs include 13 in the Bureau of Education for the Handicapped, 13 in the Bureau of Elementary and Secondary Education, 6 in the Bureau of Adult, Vocational and Library Program, 11 in the Bureau of Higher Education, 4 in the Bureau of Education Personnel Development, 5 in the Bureau of Research, and 8 in the Office of Construction Services. Implications for the coordination of these programs are considered; summary charts of types of benefits and responsibilities, and alphabetical and categorical indexes are provided.

92. U. S. Public Health Service. ANNOTATED BIBLIOGRAPHY ON INSERVICE TRAINING FOR ALLIED PROFESSIONALS AND NONPROFESSIONALS IN COMMUNITY MENTAL HEALTH. Publication Number 1901. Washington, D. C.: U. S. Government Printing Office, 1969. EDRS Order Number ED 035 727. (HC $3.29)

This annotated bibliography presents 169 entries of materials published between 1960 and 1967 classified into the following sections: (1) physicians--roles and continuing education; (2) nurses; (3) school psychologists; (4) teachers, special educators; (5) clergy; (6) social work technicians, welfare workers; (7) police; (8) mental health workers (middle-level); (9) nonprofessionals; (10) volunteers; and (11) urban agents. A subject index is included. Related inservice training bibliographies pertaining to key professionals in community mental health and staff in residential schools are available as VT 009 916 and VT 009 918.

93. U. S. Public Health Service. ANNOTATED BIBLIOGRAPHY ON INSERVICE TRAINING IN MENTAL HEALTH FOR STAFF IN RESIDENTIAL INSTITUTIONS. Publication Number 1902. Washington, D. C.: U. S. Government Printing Office, 1969. EDRS Order Number ED 035 728. (HC $3.29)

This annotated bibliography presents 86 entries classified into the following sections: (1) Regional Conferences, (National Institute of Mental Health planning conferences on inservice training held in 1963), (2) Multi-discipline, Multi-level training, (3) Professionals (administrators, psychiatrists, psychologists, psychiatric nurses), (4) Child care workers, (5) Aides, Attendants, Technicians, and (6) Volunteers. A subject index is included. Related inservice training bibliographies pertaining to community mental health key professionals and allied personnel are available as VT 009 916 and VT 009 917.

94. Verner, Coolie and Others. THE PREPARATION OF ADULT EDUCATORS: A SELECTED REVIEW OF THE LITERATURE PRODUCED IN NORTH AMERICA. Syracuse, N. Y.: ERIC Clearinghouse on Adult Education, 1970. EDRS Order No. ED 041 180 (HC $3.29)

95. Wallin, J. E. Wallace. "Changing Emphasis in the Field of Mental Retardation." JOURNAL OF EDUCATION, 51, October, 1968, pp. 105-111.

96. Weingold, Joseph T. GUIDELINES FOR PROGRAM EVALUATION OF SHELTERED WORKSHOPS FOR THE MENTALLY RETARDED. New York: New York State Association for the Help of Retarded Children, Inc., 1961.

97. Whitman, Myron A. and Sprague, Robert L. "Learning and Distractibility in Normals and Retardates." TEACHER PREPARATION AND TRAINING SCHOOL BULLETIN, 65, November, 1968, pp. 89-101.

This article reports an experiment designed to ascertain discrimination problem performance for two subject populations matched on mental age--normal kindergarten and first grade boys and institutionalized retarded males. All subjects served in three conditions--non-distracting, minimally distracting, and maximally distracting. If retardates are more distractible than normals, a population by distracting condition interaction should have resulted. Although the performance of normal subjects was significantly superior to that of retardates, there was no interaction. The difficulties inherent in making generalizations for groups as heterogeneous as "normals" and "retardates" are discussed.

98. Wortis, J. "Poverty and Retardation: Biosocial Factors." In J. Wortis (ed.) MENTAL RETARDATION: AN ANNUAL REVIEW. New York: Greene and Stratton, Inc., 1970.

ORDERING INSTRUCTIONS

Many documents listed in this review are available in microfiche and hard copy (xerographic) reproductions from the ERIC Document Reproduction Service (EDRS).

ONly documents identified with an "ED" number may be ordered from EDRS. All microfiche, regardless of number of pages, cost 65¢ per document. Hard copy prices are indicated in the bibliographic citations, and differ accroding to pagination.

In ordering from EDRS the following information should be furnished:

The "ED" number (title need not be given);

The type of reproduction desired--microfiche or hard copy;

The number of copies being ordered.

Payment must accompany orders totaling less than $10.00

Send to: ERIC Document Reproduction Service

P.O. Drawer O

Bethesda, Maryland 20014

ERIC DOCUMENT REPRODUCTION SERVICE
LEASCO INFORMATION PRODUCTS, INC.

P.O. Drawer O, Bethesda, Md. 20014

For EDRS Use
CUSTOMER NO. _____
ORDER NO. _____
TYPE _____ CAT. _____
INVOICES _____
ON FILE _____

ON-DEMAND ORDER BLANK

BILL TO: _____ (Zip)

SHIP TO: _____ (Zip)

PURCHASE ORDER NO. _____

ERIC REPORTS TO BE ORDERED

Item	ERIC Report (6 Digit ED No.)	Number of Copies M/F	Number of Copies PC	Unit Price	Total Price
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
	☐ PREPAID _____			*SUB-TOTAL*	
	☐ TAX EXEMPTION NO. _____			*SALES TAX*	
	☐ DEPOSIT ACCT. NUMBER _____			*POSTAGE*	
	☐ CHECK NUMBER _____			*TOTAL*	

Orders are filled only from ED accession numbers. Titles are not checked. *Please be sure you have supplied the correct numbers.*

IMPORTANT INSTRUCTIONS

- Order ERIC Reports only by 6 digit ED No. shown in Research in Education (RIE) or other indices
- Indicate if you want microfiche film (M/F) or paper copies (PC)
- Enter unit prices from the Price List below. All other prices are out of date
- Enclose check or money order payable to EDRS for orders totalling less than $10.00

PRICE LIST

MICROFICHE (M/F)	PAPER COPIES (PC)	
Each ERIC Report – $0.65	Number of Pages per ERIC Report:	Price
Microfiche Film (M/F) is a 4" x 6" sheet of microfilm on which up to 70 pages of text are reproduced.	1 – 100	$3.29
	101 – 200	6.58
	201 – 300	9.87
	Each additional 100 pages or portion thereof –	$3.29

NOTE:

1. Fourth Class Book Rate or Library Rate postage is included in above prices.
2. The difference between Book Rate or Library Rate and first class or foreign postage (outside the continental United States) rate will be billed at cost.
3. Paper copies (PC) shown as hard copy (HC) in past RIE issues, will be stapled with heavy paper covers.

ERIC Clearinghouse
APR 25 1973
on Adult Education

SIGNATURE _____ DATE _____

TITLE OR DEPT. _____

MAKE ALL DRAFTS PAYABLE TO EDRS

ERIC DOCUMENT REPRODUCTION SERVICE is operated by Leasco Information Products, Inc. for the U.S. Office of Education.

7/72

**SUBJECT TO ALL TERMS AND CONDITIONS ON REVERSE SIDE OF THIS FORM.*